Meeting Description: Michigan Geographic Framework Users Meeting
Date: May 1, 2003   **Time:** 10:00 a.m.
Location: Michigan Center for Geographic Information, George W. Romney Building, 10th Floor Conference Room

I.   Approval of Meeting Minutes

II.   Geographic Framework Program
        A. Act 51 Reconciliation Update
    Everett Root, Michigan Center for Geographic Information (CGI), reported on 1) the Act 51 reconciliation of framework to Act 51 maps; 2) the re-creation of new Act 51 maps from framework of all the cities and villages in Michigan; 3) production of countywide Act 51 map for each county road commission. All maps are printed except Wayne County, which will go in the mail today. 533 cities and villages and 83 county maps have been created, printed, and mailed out. CGI has received comments via the maps that are returned to Michigan Department of Transportation (MDOT). MDOT is organizing, stamping, cataloging, and checking them in to note the changes. MDOT has been sending CGI some information about errors, omissions, and they are making a the changes. Errors and omissions are priority because it affects their milages. They are also commenting on roads that don't exist any more and name issues. Dick Turcott, MDOT, is responsible for communication between cities, villages, and counties. His staff verifies the changes and do the accounting of the sum of mileage. Then the maps go to CGI for framework update. When Version 3 is complete CGI will go into editing mode again.
        B. Digital Ortho Update
    Nothing to report.
        C. Framework Network Pilot Partnerships Update
    Everett Root, CGI, reported that this is an effort to partner with local agencies for framework updates and the focus has been on Qualified Voter Files (QVF) files.   Southfield is ready to come on board. Valdis Kalnins, Allegan County GIS, and Rayan Ray, CGI, talked about the possible Allegan County/ QVF to the map reconciliation. The St. Clair County clerk is eager to be involved. Barry, Allegan, Branch, St. Clair, and Livingston Counties will be involved as well. CGI is working closely with the clerks. The Oakland County proposal is in the works.
    Mike Hass, Barry County, asked if the new versus revised code is working.
    Everett Root, CGI, responded that he thinks that it is working fine. It came up with situations where 9-1-1 readdressing issues resulting in change rather than new and they are having to address the issue of change.
    Mike Hass, Barry County, asked if on a road the changes the name or range should he submit the old name and range or the new range and name. The clerks have been told that they need to submit it for jurisdictional information.
    Everett Root, CGI, responded that CGI looks at the geographic information systems (GIS) but not sure if the QVF staff is set up to look at the GIS. They have to give them that capability. Everett doesn't know what the link the QVF on – they have a QVF id system but it is not a long-term identifier. Names and address ranges are their main component. Will probably need to put a GIS application on their machines so that they can do it.
        D. Land Use Commission
    Everett Root, CGI, reported that Rob Surber, CGI, handed out a draft last meeting that was submitted to the governor's commission on land use issues. Since then CGI submitted more information there was requested by the commission. Rob received 13-15 responses to his email asking about land use activities around the state. They were also given the background information of the statutory requirements for land use mapping which goes back to Michigan

Resource Information System (MIRIS). They were also given recommendations for how GIS can be to develop land use policy.

E. Version 3 Update

Everett Root, CGI, reported that the Act 51 reconciliation is post Version 2. It will be the main changes to Version 3. It will include attention to the roads, addition to new roads, edits to roads, topology changes, significant review of the trunk lines, and significant review of city and village boundaries. Version 3 not only tweaks boundaries but catches annexations. CGI mapped all 83 counties and have been seamed at the county lines. Now CGI is doing quality control to verify continuity of the data. MDOT is reviewing trunk line information - functional class, legal system. The ramps have gotten new attention as well as the odd features - rest areas and weigh stations. CGI is nearly to the lock down phase where no more features change. Dennis Kenaga, MDOT, will begin all 83 counties and begin his quality control process for Michigan Accident Location Inventory (MALI) data to generate MALI tables and new products that are required when a new version is created. CGI anticipates Version 3 delivery some time this month. CGI will have coverages available – let Everett know and he can put on CD or FTP site. Shape files will be later. All city, village, township, and county boundaries are in place. CGI has not closed the polygons on the tracts and block groups. Version 2 tracts and block groups will line up with Version 3.

Jeroen Wagendorp, Allegan County GIS, asked if CGI has attributed the tract and block groups in-house or does it go outside and then get linked back up.

Everett Root, CGI, responded that CGI will make sure polygons are on framework and then run an AML to populate the internal features so it will be tracted to block group left and right and will be filled in every feature. This will be just the value of the tract and block group – then can build the polygon and links to census data. That is still possible on Version 2 shape files on the web site. CGI has changed the data structure - dropped 11 fields and added 5 new ones and there is a net decrease of half a dozen fields. Dropped 90 fields but 90 polygons are still available off of Version 2. CGI blanked out precinct and county commissioner districts because they are not accurate any more. Will put back that data back in Version 4. The house, senate, and congressional values reflect 1990 and will probably not get a chance to put the 2000s in there. Renamed block fields with 1990 to be clear that this is the value of 1990 TIGER. When the 2000 blocks come along CGI will add a couple fields to show that or rename the fields.

Gordon Rector, Census Bureau, asked if all updates from last year's Act 51 are from the Act 51 review that was done in 2001?

Everett Root, CGI, responded the maps that were mailed in 2003 are for construction projects that took place during 2002 with any additions. Version 3 is what was in the 2001 Act 51 maps. Based on the results of that, new maps were created and they can be used for new additions and deletions. Will receive back during 2003 and those will be put into framework and possibly a cartography version of framework can be generated. They will be referenced in Version 4. The Act 51 process is effective December 2001; city and village boundaries and trunk line are effective December 2002; certified non-state roads are effective December 2001. The roads may be there but not certification. Federal aid boundaries will be put in now. MDOT has created shape files and they will be put on post Version 3 – federal aid urban boundaries (FAUB) left and right will normally follow census blocks. There are rules for the 7 MDOT fields, but there are a few idiosyncrasies around the state so have put in a coding field to explain. It will be documented in the data dictionary. CGI will be doing one-way pairs that are trunk line routes that are separated by a city block or more. Their physical referencing (PR) numbers have been synched, their traffic alignment attributes have been filed in, legal systems and functional classes have been assigned, depending on the model that MDOT is measuring by, they may count both sides but another project they may only count one side. It will help MDOT with their reporting.

Will also add interchange numbers that will be put on all arcs that are associated with interchanges on trunk line features. It will put on ramp features, cross features, underpasses/overpasses, etc. The number will be assigned to the arc not the node.

Ann VanSlembrouck, SEMCOG, asked if the linear system is back.

Everett Root, CGI, stated that Dennis Kenaga, MDOT, is doing that. It will be in Version 3. CGI decided to put ramp numbers on all exit ramps for Map Michigan. Then the user will get name and number for all exit ramps. Map Michigan is up and running but has had its hiccups - had problems with location program with Zip+4.

III. Michigan Department of Natural Resources (MDNR) Projects and Activities
Nobody in attendance.

IV. Michigan Department of Transportation (MDOT) Projects and Activities
Joyce Newell, MDOT, reported that they had a meeting the first of the month about a pilot project regarding drainage assessment. They have not finalized what the project will look like yet and have not determined the area.

Jeroen Wagendorp, Allegan County GIS, stated that they are interested in that. For their state roads that have paper maps maybe there is a possibility of just giving Allegan County GIS the scanned copies of the paper maps and use framework as base. Then the county and MDOT would each have it.

Joyce Newell, MDOT, stated that part of the problem in the past is that a lot of paper maps are out of date and they did not want to publish until updated.

Jeroen Wagendorp, Allegan County GIS, added that would be to their advantage because if they put cadastral layer on the top in every property description at the subdivision level there would be the right-of-way of anything including MDOT. If there is a conflict where the two don't match. Then have to spend time to determine which set of records is correct.

Joyce Newell, MDOT, added that it is parcel matching software that can read the descriptions. A problem using the software is that all of MDOT descriptions are based on center of road. There is a discussion to find what can be done and how MDOT can assist. May have more to report next month.

V. Michigan State Police (MSP) Projects and Activities
Nobody in attendance.

VI. Michigan Department of Environmental Quality (MDEQ) Projects and Activities
John Esch, MDEQ, reported MDEQ had the initial Map Image Viewer training. Most of the data has been loaded on MDEQ servers. Now have to get on professional and scientists desks. MDEQ had a number of applications of specific programs called I-Map and Side Map and trying to roll into a subset of Map Michigan. Can the national census data be downloaded into block groups and tracts into polygons and download the population and link it.

Everett Root, CGI, stated the blocks are not mapped on framework at this time. TIGER has census blocks those are not available on the web site but they are at CGI. The census data function has been moved to the Library of Michigan, but CGI still maintains their census expertise. CGI handles some data request and reports, but officially it is at the library. Arrangements can be made to do something, depending on what is needed. The application on the web site was done with block group and tract with Summary File 1 (SF1) data. The goal is improve that and have the minor civil divisions (MCD) and Summary File 3 (SF3) data there. The polygons are available.

John Esch. MDEQ, stated that the geographic network is the actual blocks themselves.

Ann VanSlembrouck, SEMCOG, added that they are on the Census Bureau web site.

Jeroen Wagendorp, Allegan County GIS, commented that it is the population number. There is no block level data to speak of – that would be too sensitive.

John Esch, MDEQ, commented that MDEQ used to have an official IMAGIN membership and thought they were paid up and unfortunately they aren't. Now they are scrambling to get people registered for conference.

Everett Root, CGI, stated that just a few CGI staff are members. The option to do the group membership was eliminated.

Ann VanSlembrouck, SEMCOG, added that the primary person pays more and secondary people pay less. There is not an agreement just have to pay the membership.

John Esch, MDEQ, stated that MDEQ heard rumors of a research group about aerial thermography doing work on Michigan inland lakes to determine if ground water is discharge zones or where it seeps in the bottom of lakes. Nobody seems to know anything about this. MDEQ has a lot of interest in where the data is and who is doing this.

Jeroen Wagendorp, Allegan County GIS, suggested contacting Steve Aichele, since he is about as knowledge as anybody.

John Esch, MDEQ, asked if anybody knows how many counties have digital parcel data - whether good or bad.

Everett Root, CGI, added that CGI has been approached about posting parcels layers on the CGI web site as a posting service.

John Esch, MDOT, stated that he also heard that there is an update of the address matching data in framework.

Everett Root, CGI, responded that MDEQ is funding 3-4 month project to take a hard look at addresses to improve the addresses for geocoding. The Qualified Voter Files (QVF) will be one of the resources. Right now CGI is researching the best approach to take.

Ann VanSlembrouck, SEMCOG, asked if CGI is updating zip codes.

Everett Root, CGI, responded that they are important as well. That is sort of a constant research project. They are always changing, new ones are being created, some are going away. CGI met with 3 regional Post Offices (Detroit, Royal Oak, and Grand Rapids) to try to develop relationships. CGI did several paper maps of what CGI's zip code boundaries and gave to Royal Oak for them to draw on and return them.

Jeroen Wagendorp, Allegan County GIS, stated the only way is to have a decent cadastral layer with property addresses attached to them. The relationship with the United States Postal Service (USPS) isn't there yet.

Everett Root, CGI, commented a proposed idea is if QVF gets to framework and the framework names become the official source instead of ZIP+4 they would be matched against framework. If it doesn't match in framework, it would get kicked out. Framework has to be put in the position first and that could come about with QVF to the map.

Mike Hass, Barry County, added that shifting away from ZIP+4 would reduce the frustration level.

VI.   Michigan State Police (MSP) Projects and Activities

Everett Root, MSP, reported that CGI staff went to the Emergency Management office for a tour. CGI staff will back up Eric Nischan's position in the event of an emergency.

VII.   Michigan State Industries (MSI) Projects and Activities

Charles Bender, MSI, reported that they continue with the 'As Built' project. MSI has gone through 100 CDs plus 34 that they duplicated and are returning. Each of the counties may have

20-30 TIFs and must identify which roads are1960 or newer or older than 1960. Which county does MDOT want first.

Joyce Newell, MDOT, stated they compiled a list and then MDOT will set priorities. After 1960 is more critical at this time before then is important to know but not as critical.

Charles Bender, MSI, stated that they have received lakes project data from Fisheries. They have identified some of the data they want MSI to do. MSI will review protocols Fisheries wants done and MSI is wondering if they come under budget if they will get additional lakes done or call it even. MDNR was looking at contours, bottoms, and vegetation. Charles contact Lidia Szabo, Institute of Fisheries Research, to see if they could combine their efforts with other departments.

Lidia Szabo, Institute of Fisheries Research (IFR), said that she contacted John Esch, MDEQ, and he expressed interest and maybe some additional items that they thought would be a minimal effort and provide good information. They picked some lakes that were set for MDEQ's sample this summer and they can generate a list of additional lakes that could be generated in 2004.

Charles Bender, MSI, commented it takes between 15-30 minutes per lake. There were a couple hundred lakes that were identified.

Lidia Szabo, IFR, added that there were around 60 lakes on the CD. That is the first round including lakes that were digitized by others and want to standardize protocol. There are a few in the Lake Huron basin and the northern Lower Peninsula and the Upper Peninsula.

John Esch, MDEQ, asked who does the sampling.

Lidia Szabo, IFR, responded that she is not sure who does the sampling other then MDEQ. Some lakes received more frequent sampling.

Charles Bender, MSI, added that it cost $18 per hour for Auto Cad work or GIS work. They also do digital plotting and the cost is dependant on the paper and size of plot.

VIII.   CGI Projects and Activities
    A. Children's Action Network (CAN)

Everett Root, CGI, reported that 216 Michigan schools were identified by the federal 'No Child Left Behind' program. The governor's office has a committee that formed the Children's Action Network (CAN). Last week CGI did a GIS demonstration for a school in the city of Detroit. It included attendance area for this elementary school and using GIS and maps demonstrated what is near this school. CGI mapped state services, state facilities, demographic analysis from census data in the area. It was well received. Nine schools have been mapped to demonstrate at another committee meeting that is scheduled for today. CGI will make a series of maps showing facilities around the schools, another map with digital orthos in the back, and reports. The Michigan Family Independence Agency (FIA) is a big part of this. The characteristics of clients are being mapped, non-profits, faith and non-faith based organizations are being mapped. The mayors for 9 cities will be in attendance at the meeting and packets have been made for each for their areas. The goal is to help the schools. CGI will be working on a GIS information plan and possibly an Internet application for decision-makers, parents, and school administrators. In May 216 principals are invited to a meeting where this information may be shown to them. CGI is in the data analysis stage. CGI will show them a lot of data available and need to find out what they want to include in the web application, the paper maps, and reports. A lot of the work is geocoding the addresses. For the Detroit schools, there was a lot of data from Wayne State University and there is not that kind of data available in other areas - boys/girls clubs, health care facilities, churches, blood pressure testing. CGI may be soliciting more information. Another layer being looked at is paroles' addresses. Attendance area was the first request. CGI came up with a paper map that they scanned and registered and got on the phone and called schools and received a significant number of paper maps and one digital file

from Grand Rapids. When service is identified, it may be on the GIS Listserv. The day care centers come from the MFIA database. GIS will play a big role in this effort.

IX.   MSU Center for Remote Sensing and GIS Projects and Activities

Everett Root, CGI, reported that Rob Surber, CGI, with Pat Cummens, ESRI, will present on the geo data base Editor for framework for the IMAGIN Conference. There will also be panel discussion on the framework network pilot partnerships.

Ann VanSlembrouck, SEMCOG, added that the federal level will be there to talk about I-Teams. It was explained to her that SEMCOG is already on what is required of I-Teams.

Gordon Rector, Census Bureau, added that it is the idea that federal, state, local governments share resources and do not duplicate efforts.

X.   County / Local Projects and Activities

Everett Root, CGI, stated that he was asked by staff to have Jeroen look at a file of framework roads that have been removed because they could not find them.

Jeroen Wagendorp, Allegan County GIS, reported that he received an e-mail from Mackinac County. A person starting 9-1-1 in Mackinac County was put on the spot by a local bidder who said that only licensed surveyors in Michigan can do GIS work.

Everett Root, CGI, added that Mackinac County is putting out a request for purchase (RFP) to global position system (GPS) all driveways in the county for 9-1-1. They are going to get a point with an address. A vendor said that a licensed surveyor must do that. Part of the RFP is that the vendor must use framework and GPS roads that are missing from framework. Everett wrote note saying that CGI will accept the data if not collected by a licensed surveyor.

XI.   Regional Projects and Activities

Ann VanSlembrouck, SEMCOG, reported that they are working on 2000 Land Use Update. Block attributes are coming along pretty well. Staff is working on attributes for Wayne County – they are still in the beginning stages. Plan to be done in a year. They are working on a 2005 regional flight and are researching a schedule they need as far as SEMCOG's schedule to go through all the channels and get it approved by finance and budget. The next meeting is May 20. SEMCOG did talk to 9 vendors to find out if this is possible because they are flying 4,600 square miles and if they could deal with a tight window, and their cost for full digital orthos not using traditional film, but this is yet to be determined. Color is about $800,000-$900,000 and black and white is about $400,000-$500,000. Some vendors gave price per square mile and some gave a ballpark for the whole project. SEMOG talked to 9 vendors and 7 said if they had to make a decision today, they would recommend traditional film.

Jeroen Wagendorp, Allegan County GIS, stated that Woolpert bought a platform that is coming along digitally. For a long time, the problem was the plane was flying too fast for sensors to get data up and on to a hard drive. Woolpert divided it into 4 parts and had 4 servers in the airplane to get it off quick enough and then would splice it back together.

Ann VanSlembrouck, SEMCOG, commented the vendors said that if they had to make decision today would recommend black and white but by 2005 there may be more options. Waiting time is too long.

Jeroen Wagendorp, Allegan County GIS, commented that is why Image America looks good. Allegan County has the Digital Terrain Model (DTM) for them to use. Image America has a 2 month turn around time for 6 inch black and white and it is good stuff.

Ann VanSlembrouck, SEMCOG, added that some counties have DTM or Digital Elevation Model (DEM) that will support 2-foot contours; some support 5-foot contours; and a 2 have the USGS. SEMCOG meets tomorrow internally to get the schedule down to figure when they have

to put together the RFP and the scope of services. Then meet in a couple of weeks with counties to put together scope of services. Also working with their 7 counties under the umbrella of the Standards Committee under their Regional Committee and they are discussing standardizing a list of layers they will share with each other in case of an emergency. The next meeting is June 4, 2003. Livingston County has always had color and they will want to continue with color. The group has not decided between black and white or color.

   Jeroen Wagendorp, Allegan County GIS, commented that he was told that 12-inch color is almost as good as 6-inch black and white.

   Ann VanSlembrouck, SEMCOG, stated that they purchased ArcSDE.

   Jeroen Wagendorp, Allegan County GIS, commented that he heard about a licensing issue for MrSID that they are licensing per frame for serving public data and that the Library of Congress has gone to JPEG 2000 to get around that.

   Ann VanSlembrouck SEMCOG, said that she called to get a price software to convert older stuff from TIF to MrSID.

   Jeroen Wagendorp, Allegan County GIS, added that the Library of Congress and the National Art Institute have art work that can be downloaded and they charge per MrSID.

   Everett Root, CGI, commented that is how all the digital quarter quads are served out.

   Jeroen Wagendorp, Allegan County GIS, stated that he would find out more about why they dropped MrSID and went to JPEG 2000. It was finically induced by licensing that they could not afford.

   Everett Root, CGI, added that it is expensive to get the publisher. It was $4,500 to get it to make unlimited mosaics. There was a cheaper version, but the mosaic size was limited. If converting TIFs to SIDs it would be cheaper.

   Ann VanSlembrouck, SEMCOG, said that the cheapest one is $2,900 for 10 gig of data. It is Geo Express software this a volume per year.

   Jeroen Wagendorp, Allegan County GIS, agreed because they had an old copy that cost $5,000 and they can crunch anything they want. If you do 6-inch color per square mile it becomes astronomical.

   Ann VanSlembrouck, SEMCOG, stated that for the 2005, they are going to put in the RFP that they have them delivered in TIF and MrSID. For the older stuff, '85, '90, and '95, that they want to convert to put on their network.

   Abbi Mueller, WMRPC, reported that they are working on the same stuff. They are finishing hazardous mitigation and will be working on Allegan County.

XII.   Federal Projects and Activities
   Gordon Rector, US Census Bureau, reported they had received from headquarters a request for 42 more county framework files to eventually go through TIGER repositioning – but the 42 will probably not go through until next year's batch, but they want to make sure they qualify.

   Everett Root, CGI, added that apparently they are going to look at CGI's hydro at least the features that came out of Michigan Resource Information System (MIRIS) that are 1:24,000. There was a discussion about putting CGI's point identifiers on TIGER nodes.

   Gordon Rector, Census Bureau, commented that anything like that is a change order in the national contract and that involves money. Part of the contract done the road calls for some kind of change detection that will look at counties where there has been an increase in features and they would go back through the process to pick up new features. It will have to meet some criteria. May do this in-house.

XIII.   Other Issues

Lidia Szabo, Institute for Fisheries Research (IFR), reported producing the NHD at 1:24000 scale. They only have 1 CD, Manistee, available for download. The watershed provided by MDEQ eliminates shoreline in the cataloging unit. It appears that there is a shoreline but when submitted to the National Hydro Dataset (NHD) for review the shoreline is miscoded and this is leading to a number of problems. The Pierre Marquette and Waiska had been improved to deal with the issue. The Ausable still needs watershed boundary fixed. There are 4 complete and 8 to go. The Fisheries Division is trying make these like the imagery maps available online with a textural interface so they can add a watermark or copyright notice on these.

XIV.   Next Meeting

June 1, 2003, 10 a.m. until 12 p.m., Michigan Center for Geographic Information, George W. Romney Building, 111 S. Capitol, 10th Floor, Lansing, MI 48913